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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/004,952	12/05/2001	Yves Schabes	401122.0004	8503
77027	7590	10/29/2008	EXAMINER	
Williams Mullen P.O. Box 12109 Research Triangle Park, NC 27709-2109			TO, BAOQU'OC N	
			ART UNIT	PAPER NUMBER
			2162	
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			10/29/2008	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/004,952

**Applicant(s)**

SCHABES ET AL.

**Examiner**

BAOQUOC N. TO

**Art Unit**

2162

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 July 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6, 16-18, 20-21, 25, 27, 34-36, 39, 64, 66, 67 and 69-74 is/are pending in the application.
- 4a) Of the above claim(s) 65 and 68 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6, 16-18, 20-21, 25, 27, 34-36, 39, 64, 66-67 and 69-74 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

1. Claims 1 and 66-67 are amended, claim 65 and 68 are canceled and claims 69 - 74 are newly added in the amendment filed on 07/28/2008. Claims 1-6, 16-18, 20-21, 25, 27, 34-36, 39, 64, 66-67 and 69-74 are pending in this application.

***Response to Arguments***

2. Applicant's arguments with respect to claims 1 and 65 have been considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 1-6, 16-18, 20-21, 25, 27, 34-36, 39, 64, 66-67 and 69-74 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 1 and 66 are abstract ideas and not produce any concrete, useful and tangible results.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-6, 16-18, 20-21, 25, 27, 34-36, 39, 64, 66-67 and 69-74 are rejected under 35 U.S.C. 102(e) as being anticipated by Trower, II et al. (Patent No. 6,922,810 B1).

As to claim 1, Trower, II discloses a method of fulfilling an information need comprising:

receiving a query comprised of one or more fully specified terms and one or more at least partially unspecified terms pertaining to the information need wherein the at least partially unspecified terms are separate from the one or more fully specified terms in the query and the at least partially unspecified terms include a predefined character sequence representing a matching restriction that defines at least one of: a syntactical criteria, a morphological criteria, and a criteria defined in accordance with a determination by a computer program (for example what is %symbol%+ trading at:...) (col. 10, lines 20-26); and

determining one or more matches for the query, wherein a criterion for determining one of said matches specifies that (i) a relative order of at least one term of said query need not be preserved with respect to at least one other term included in said query, and (ii) said one or more matches for the query are determined in accordance with said matching restriction (the rules in grammar 220 can include

variable in addition to wildcards. Variables are similar to wildcards in that they can be matched by any user input....) (col. 10, lines 1-7).

As to claim 2, Trower, II discloses the method of claim 1, further comprising: identifying documents in an index that contain the one or more at least partially unspecified terms, the index including preanalyzed contexts of terms appearing within a plurality of documents (for example what is %symbol%+ trading at:...) (col. 10, lines 20-26).

As to claim 3, Trower, II discloses the method of claim 1, wherein the method further comprises: identifying contexts within an index that in accordance with the query, the index including preanalyzed contexts of terms appearing within a plurality of documents; converting the query into a finite state machine; and matching the finite state machine against the identified contexts (for example what is %symbol%+ trading at:...) (col. 10, lines 20-26)

As to claim 4, Trower, II discloses the method of claim 3, wherein the finite state machine is a finite state transducer (computer) (col. 2, lines 49-52).

As to claim 5, Trower, II discloses the method of claim 3, wherein the finite state machine allows for the appearance of fully specified and at least partially unspecified terms in any order in a potential matching context (for example what is %symbol%+ trading at:...) (col. 10, lines 20-26).

As to claim 6, Trower, II discloses the method of claim 3, wherein the finite state machine allows for one or more intervening words between the fully specified and at

least partially unspecified terms in a potential matching context (for example what is %symbol%+ trading at:...) (col. 10, lines 20-26).

As to claim 16, Trower, II discloses the method of claim 3, wherein the contexts are stored as finite state machines (computer) (col. 2, lines 49-52).

As to claim 17, Trower, II discloses the method of claim 3, wherein the documents are accessible over the Internet (Internet) (col. 4, lines 35-41).

As to claim 18, Trower, II discloses the method of claim 3, wherein the documents comprise World Wide Web Pages (Internet) (col. 4, lines 35-41).

As to claim 20, Trower, II discloses the method of claim 1, further comprising: assigning a score to a match (score module) (col. 10, lines 55-67).

As to claim 21, Trower, II discloses the method of claim 20, wherein the score reflects the number of times an instance of the match is located among a plurality of documents (for example what is %symbol%+ trading at:...) (col. 10, lines 20-26).

As to claim 25, Trower, II discloses the method of claim 20, further comprising: ranking the documents that contain a match based on a number of times the match is located within a document (score module) (col. 10, lines 55-67).

As to claim 27, Trower, II discloses the method of claim 1, wherein said one or more partially unspecified terms includes a syntactic or a morphological restriction.

As to claim 34, Trower, II discloses the method of claim 2, wherein the index comprises locations of terms within documents (for example what is %symbol%+ trading at:...) (col. 10, lines 20-26).

As to claim 35, Trower, II discloses the method of claim 34, further comprising: determining the location of a term in the query within a document using the index; and locating a match for the query based on the location of the term within the document.

As to claim 36, Trower, II discloses the method of claim 1, further comprising: ranking a plurality of the located matches or portions thereof (scoring module...) (col. 10, lines 55-67).

As to claim 39, Trower, II discloses the method of claim 36, wherein the ranking is based on one or more features selected from the list consisting of: the location of a match within a document, a weight assigned to a document that contains a match, the age of a document that contains a match, the source of a document that contains a match, and a format feature of a match within a document (scoring module...) (col. 10, lines 55-67).

As to claim 64, Trower, II discloses the method of claim 1, wherein said query includes a delimiter indicating a first portion of said query for which a relative order is preserved for one or more terms included in said first portion, said relative order being in accordance with a physical position of each term in said first portion with respect to any other terms in said first portion (for example what is %symbol%+ trading at:...) (col. 10, lines 20-26)

As to claim 66, Strower, II discloses a computer readable medium storing a computer program product for fulfilling an information need (memory, ROM, RAM) (col. 3, lines 48-50 and col. 3, lines 65-67), the computer readable medium comprising:

computer program code for receiving a query comprised of one or more fully specified terms and one or more at least partially unspecified terms wherein the at least partially unspecified terms are separate from the one or more fully specified terms in the query, and said at least partially unspecified terms include a predefined character sequence representing a matching restriction that defines at least one of: a syntactical criteria, a morphological criteria, and a criteria defined in accordance with a determination by a computer program (for example what is %symbol%+ trading at:...) (col. 10, lines 20-26); and

computer program code for determining one or more matches for the query\_in accordance with said matching restriction, wherein a relative order of at least one term of said query need not be preserved with respect to at least one other term included in said query (the rules in grammar 220 can include variable in addition to wildcards. Variables are similar to wildcards in that they can be matched by any user input....) (col. 10, lines 1-7).

As to claim 67, Strower, II discloses the computer readable medium of claim 66, wherein said query includes a delimiter indicating a first portion of said query for which a relative order is preserved for one or more terms included in said first portion, said relative order being in accordance with a physical position of each term in said first portion with respect to any other terms in said first portion (for example what is %symbol%+ trading at:...) (col. 10, lines 20-26).

As to claim 69, Trower, II discloses the method of claim i that wherein the matching restriction includes a morphological criteria (the rules in grammar 220 can



include variable in addition to wildcards. Variables are similar to wildcards in that they can be matched by any user input....) (col. 10, lines 1-7)

As to claim 70, Trower, II discloses the method of claim 69 that wherein the morphological criteria includes one of a noun, verbal noun, adjective, conjunction, pronoun, adverb, verb, transitive verb, intransitive verb, verb in past tense, verb in present tense, verb in future intense, present participle of a verb, past participle of a verb, and gerund (the rules in grammar 220 can include variable in addition to wildcards. Variables are similar to wildcards in that they can be matched by any user input....) (col. 10, lines 1-7)

As to claim 71, Trower, II discloses the method of claim i that wherein the matching restriction includes a syntactical criteria (the rules in grammar 220 can include variable in addition to wildcards. Variables are similar to wildcards in that they can be matched by any user input....) (col. 10, lines 1-7)

As to claim 72, Trower, II discloses the method of claim 71 that wherein the syntactical criteria includes one of a noun phrase, verb phrase, prepositional phrase, adverbial phrase, and adjectival phrase (the rules in grammar 220 can include variable in addition to wildcards. Variables are similar to wildcards in that they can be matched by any user input....) (col. 10, lines 1-7)

As to claim 73, Trower, II discloses the method of claim i that wherein the matching restriction includes a definable category.

As to claim 74, Trower, II discloses the method of claim i wherein the matching restriction includes a criteria defined in accordance with a determination by a computer program (software module for processing (col. 10, lines 4-7).

### ***Conclusion***

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

### ***Contact Information***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Baoquoc N. To whose telephone number is at 571-272-4041, or unofficial fax number for the purpose of discussion (571) 273-4041 or via e-

mail BaoquocN.To@uspto.gov. The examiner can normally be reached on Monday-Friday: 8:00 AM – 4:30 PM, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached at 571-272-4107.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Any response to this action should be mailed to:  
Commissioner of Patents and Trademarks  
Washington, D.C. 20231.

The fax numbers for the organization where this application or proceeding is assigned are as follow:

(571) 273-8300 [Official Communication]

/Baoquoc N To/

Primary Examiner, Art Unit 2162